

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:
MEDB000084E

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED). This Certificate is issued by DNV GL SE based on the notification of the Federal Maritime and Hydrographic Agency of Germany.

This is to certify:

That the Penetrations through "B" class divisions: pipe, duct, trunk, etc penetrations

with type designation(s)
B-15 extended wall with pipe and duct penetration

Issued to
SAINT-GOBAIN ISOVER G+H AG
Ludwigshafen am Rhein, Rheinland-Pfalz, Germany

is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2022/1157**,
item No. MED/3.27b. SOLAS 74 as amended, Regulation II-2/9 and IMO 2010 FTP Code.

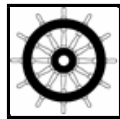
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2027-12-19**.

Issued at **Hamburg** on **2022-12-20**

DNV local unit:
Augsburg

Approval Engineer:
Hagen Markus



Notified Body
No.: **0098**

for **DNV SE**

Christine Mydlak-Roeder
Head of Notified Body

The mark of conformity may only be affixed to the above type approved equipment and a Manufacturer's Declaration of Conformity issued when the production-surveillance module (D, E or F) of Annex B of the MED is fully complied with and controlled by a written inspection agreement with a Notified Body. The product liability rests with the manufacturer or his representative in accordance with Directive 2014/90/EU. This certificate is valid for equipment, which is conform to the approved type. The manufacturer shall inform DNV SE of any changes to the approved equipment. This certificate remains valid unless suspended, withdrawn, recalled or cancelled. Should the specified regulations or standards be amended during the validity of this certificate, the product is to be re-approved before being placed on board a vessel to which the amended regulations or standards apply.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



Product description

B-15 class extended bulkhead made of U SeaProtect Slab 66 with one layer of 50mm thickness, joined together with pins, washers and perforated steel. Reference MEDB00007MS issued by DNV notified body 0098.

Ducts and pipes insulated on both sides of the extension with U SeaProtect Roll 46, length 150mm and 30mm thick with alu foil shielded, closed by a winding wire galvanised 0,65mm thick:

Application/Limitation

Approved for general application for the following pipe, duct sizes and materials:

B-15 Extended bulkhead

Pipes	Insulation drawing
Copper pipe DN12 up to DN100	AK2448
Carbon steel and Stainless steel pipes DN15 up to DN150	AK2448
Thin walled stainless steel discharge pipes, e.g. "Blücher" DN50 up to DN150	AK2448, AK2453
GRP pipe DN40	AK2451

Metallic AC ducts not insulated	Insulation drawing
Rectangular 280x80mm and 350x170mm	AK2459, AK2453
Circular 80mm and 250mm	AK2453, AK2451

Metallic AC ducts – insulated	Insulation drawing
Circular 80mm and 250mm	AK2453

Rectangle ducts with area 0.022m² up to 0.060 m² and round duct 0.0050m² up to 0.050m².

Water- / Gas- tightness

Not applicable

Installation

For installation the following docs to be observed.

- Installation guide "Installation of the B15 extension penetrations Drawing for certification – AK 2478"
- Insulation design drawing "B15 Extension Pipe and duct penetrations Drawing for certification – AK 2471"


Type Examination documentation

Tests carried out

IMO Resolution MSC.307 (88), 2010 FTP Code , Annex 1: Part 3 – Class B-15 bulkhead.

Marking of product

For traceability to this certificate each hose assembly is to be permanently marked on the hose and or on the hose end fitting at least with:

Scope	Component	Marking
Manufacturers short sign-production place / production date	U SeaProtect Roll 46 30mm Alu1	 0736¹
Performance confirmed by type testing		B-15
US Coast Guard number		Acc. to MED Module D certificate

Note

¹ may only be affixed to the type approved equipment, if associated production-surveillance module (D, E, or F) is valid.

Scope	Component	Marking
Manufacturers short sign-production place / production date	steel wire 0.65mm diameter galvanized	no marking

END OF CERTIFICATE